

IN THE SPECIFICATION

[0028] The release procedure is illustrated in an 'RB' valve shown in Figure 6. Figure 6 is a split view showing the 'RB' valve locked open on one side and at the instant of release on the other. The release is accomplished by an inserted release tool T, shown schematically in the release position as T', that grabs dog 50 shown in Figure 6c and moves it to a position 50'. When that happens, a collet 52 in Figure 6d loses support from sleeve 54 when it moves up with dog 50. The lower portion 56 of mandrel 10 now can be biased down by spring 58 push down the actuating mechanism 60 to rotate ball 62 into the closed position from the open position shown in Figure 6f. At the same time, because collet 52 is undermined, the upper portion 62 63 of mandrel 10 can be pushed up by spring 42 far enough so that collets 22 can return to upper groove 36. This amount of upward movement is permitted by the J-slot assembly 64. Other release techniques are also envisioned. It should be noted that spring 24 causes collet 52 to be subsequently captured by sleeve 54 as the J-slot mechanism 64 is thereafter cycled to begin the process of reopening the valve